



## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **63256287 A**(43) Date of publication of application: **24.10.88**

(51) Int. Cl.

**B23K 20/12**(21) Application number: **62089680**(22) Date of filing: **14.04.87**(71) Applicant: **HINO MOTORS LTD**

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**(54) MANUFACTURE OF PISTON**

strongly is thus obtd. at low cost.

**(57) Abstract:**

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**PURPOSE:** To manufacture the piston of high joining strength and stabilized quality embedding a metal reinforcing member by executing finishing after fitting the annular material for reinforcing a metal with its friction pressure welding to around the combustion chamber of the piston main body or the whole apex face.

**CONSTITUTION:** A combustion chamber 12 is provided at the apex part of the piston main body 10 formed by casting an aluminum, etc. Around this combustion chamber 12 the annular material 16 to be attained to a metal reinforcing member is fitted with its friction pressure welding so as to surround the inner face thereof. The annular material 16 is formed by the heat resistant metal of a rapidly cooling solidified powder aluminum alloy, etc., and yet preferably has the tapered face 16a that the diameter is gradually reduced downwards on the outer face. After the pressure welding of said annular material 16 the piston main body 10 is subjected to finishing together with the material 16. The piston of stabilized quality embedding the metal reinforcing member subjected to solid phase joining

